

**40**  
**YEARS**  
Est. 1983



# LEGIONNAIRES' TEMPERATURE MONITORING KIT

2023

Specialists in the design & manufacture of  
temperature measuring equipment since 1983

# WHAT IS LEGIONNAIRES' & HOW TO PREVENT IT...

## LEGAL RESPONSIBILITIES & ASSESSING THE RISKS

If you are the employer or person in control of premises, you must organise a risk assessment from exposure to legionella. The revised Approved Code of Practice (ACOP) Legionnaires' disease: Control of Legionella Bacteria in water systems (L8) issued by the Government's Health and Safety Executive (HSE) significantly extends the scope of its guidance on control of legionella bacteria in water.

The code applies to all hot and cold water systems in the workplace regardless of their capacity, i.e. the lower limit of 300 litres previously used to exclude domestic systems, no longer applies. Whilst domestic systems may represent a risk, the code only applies to a risk arising from a work activity. This means that all employers, who manage premises with hot/cold water systems and/or wet cooling systems, have a legal responsibility to identify any risk of contamination and to prevent or control it. These records have to be kept for a minimum of five years.



## WHAT IS LEGIONNAIRE'S DISEASE?

Legionnaires' disease is a potentially fatal form of pneumonia. The cause of the disease is a bacterium called **legionella pneumophila**.

## HOW IS IT CAUGHT?

Legionnaires' disease is caught by inhaling small droplets of water suspended in the air which contain the legionella bacterium, e.g. spray from showers and taps.

## WHAT ARE THE SOURCES OF LEGIONELLA BACTERIUM?

The legionella bacterium is found mainly in stagnant water, e.g. ponds and rivers or buildings containing cooling tower, evaporation condensers, air conditioning and industrial cooling systems, humidifiers, spa baths and hot and cold water systems.



## WHAT AREAS ARE MOST VULNERABLE?

A wide range of workplaces, but particularly residential accommodation managed privately or by organisations, e.g. local authorities, universities, hospitals, nursing and care homes, housing associations, charities, hostels, private landlords, managing agents, hoteliers and holiday accommodation providers, including guest houses.

## WHO IS MOST AT RISK?

People most at risk are people over 45, smokers and heavy drinkers, diabetics and people who are already ill, particularly with chronic diseases or whose immune system is impaired.



## HOW USING A THERMOMETER CAN HELP CONTROL LEGIONELLA IN WATER?

Incorrect water temperature is a key risk factor for legionella growth. The legionella bacteria multiply in water at temperatures between 20 to 45 °C. A typical method of control is to store hot water above 60 °C and distribute it at above 50 °C (care must be taken to prevent scalding). Cold water should be kept below 20 °C.

**'Incorrect water temperature is a major contributor for legionella growth'**

# LEGIONNAIRES' THERMOMETER KITS

- Includes Therma 1 high accuracy thermometer & 3 probes
- Ideal for routine water temperature monitoring
- FREE traceable certificate of calibration
- Compact & robust design

The Legionnaires' temperature monitoring kit represents excellent value for money as each one is supplied in a carrying case and includes a box of 100 Probe Wipes.

The kit includes a Therma 1 digital thermometer which is a rugged and easy-to-use instrument that operates through the range of -99.9 to 1372 °C with a 0.1 °C or 1 °C resolution. The thermometer is housed in a robust ABS case that contains Biomaster Antimicrobial Technology to reduce bacterial growth.

The Therma 1 features a large, easy-to-read, LCD display with open circuit 'Err', hold and low battery indication and is powered by three AAA batteries that give a minimum of five years battery life. The unit will power-off automatically after ten minutes, maximising battery life. This feature can be disabled by the user, if required.



## LEGIONNAIRES' STANDARD THERMOMETER KIT

### Each kit contains:

- Therma 1 thermometer (221-041)
- Waterproof surface immersion probe (323-046)
- Heavy-duty PTFE wire probe (133-372)
- Zip pouch (830-037)



| Order code   | Description                | £ each |
|--|----------------------------|--------|
| 860-885  | Legionnaires' Standard kit | 102.00 |
| FREE traceable certificate of calibration included |                            |        |

## LEGIONNAIRES' PREMIUM THERMOMETER KIT

### Each kit contains:

- Therma 1 thermometer (221-041)
- Penetration probe (123-160)
- Precision ribbon surface probe (123-030)
- PTFE wire probe (133-362)
- Water-resistant countdown timer (806-150)
- Box of 100 Probe Wipes (836-220)
- ABS carrying case (834-150)




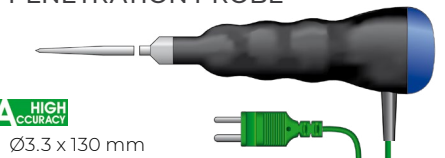















| Order code | Description                       | £ each |
|------------|-----------------------------------|--------|
| 860-860    | Legionnaires' Premium kit         | 152.50 |
| 830-227    | Protective silicone boot - black* | 8.00   |
| 832-053    | S/steel wall bracket & boot       | 17.00  |

\*Various colours available. See our website for details.  
FREE traceable certificate of calibration included

| Specification                                      | Therma 1                       |
|--|--------------------------------|
| Range 0.1 °C                                       | -99.9 to 299.9 °C              |
| Range 1 °C   | 300 to 1372 °C                 |
| Resolution   | 0.1 °C & 1 °C                  |
| Accuracy   | ±0.4 °C ±0.1 %                 |
| Battery & life                                     | 3 x 1.5 volt AAA - 10000 hours |
| Sensor type  | K thermocouple                 |
| Display  | 12 mm LCD                      |
| Dimensions   | 25 x 56 x 128 mm               |
| Weight   | 130 grams                      |
| FREE traceable certificate of calibration included |                                |

# HANDHELD TYPE K OR T THERMOCOUPLE PROBES

|                   |   | Order code   | £ each   |
|-------------------|---|--|--|
| LEGIONNAIRES' KIT | <b>PENETRATION PROBE</b><br><br>  $\varnothing 3.3 \times 130 \text{ mm}$                                  | <p>This stainless steel penetration probe is strong, versatile and ideal for measuring liquids and semi-solids.</p> <ul style="list-style-type: none"> <li>Response time less than 2 seconds</li> <li>Probe temperature range -75 to 250 °C</li> </ul>   | 123-160 31.50<br>323-160 32.50<br>(coiled lead)  |
|                   | <b>PENETRATION PROBE</b><br><br> $\varnothing 3.3 \times 130 \text{ mm}$  | <p>This stainless steel, waterproof penetration probe is strong, versatile and incorporates a heavy-duty handle with a colour-coded end cap. Suitable for liquids and semi-solids.</p> <ul style="list-style-type: none"> <li>Response time less than 3 seconds</li> <li>Probe temperature range -75 to 250 °C</li> </ul>                          | 143-161 34.00<br>143-162 34.00<br>143-164 34.00<br>143-165 34.00<br>143-166 34.00<br>143-167 34.00 |
|                   | <b>FAST RESPONSE PROBE</b><br><br>  $\varnothing 3.3 \times 100 \text{ mm}$                                | <p>This reduced tip (<math>\varnothing 1.8 \times 25 \text{ mm}</math>), fast response, stainless steel penetration probe is ideal for liquids or semi-solids i.e. soft rubber and other similar materials.</p> <ul style="list-style-type: none"> <li>Response time less than 2 seconds</li> <li>Probe temperature range -75 to 250 °C</li> </ul> | 123-159 34.50<br>323-159 35.50<br>(coiled lead)  |
|                   | <b>RIBBON SURFACE PROBE</b><br><br>$\varnothing 15 \times 130 \text{ mm}$  | <p>This precision, ribbon surface probe utilises flat ribbon technology that ensures a fast, accurate response with minimal heat loss. A right-angled version is also available.</p> <ul style="list-style-type: none"> <li>Response time less than 1 second</li> <li>Probe temperature range -75 to 250 °C</li> </ul>                             | 123-030 42.00<br>123-032 46.50<br>(right-angled)   |
|                   | <b>PTFE WIRE PROBE</b><br><br>  $\varnothing 1.5 \times 1000 \text{ or } 2000 \text{ mm}$            | <p>This PTFE insulated, exposed junction wire probe is suitable for measuring the air temperature in fridges, freezers, ovens etc. Extended probe lengths over two metres are available upon request.</p> <ul style="list-style-type: none"> <li>Response time less than 1 second</li> <li>Probe temperature range -75 to 250 °C</li> </ul>        | 133-362 10.50<br>(1000 mm)<br>133-363 11.00<br>(2000 mm)   |
|                   | <b>HEAVY DUTY PTFE WIRE PROBE</b><br><br>  $\varnothing 2.4 \times 1000 \text{ or } 2000 \text{ mm}$ | <p>This heavy-duty, PTFE insulated wire probe is ideal for measuring the air temperature in fridges, freezers, ovens etc. Extended probe lengths over two metres are available upon request.</p> <ul style="list-style-type: none"> <li>Response time less than 1 second</li> <li>Probe temperature range -75 to 250 °C</li> </ul>                 | 133-372 13.50<br>(1000 mm)<br>133-373 15.50<br>(2000 mm)   |
|                   | <b>MAGNET SURFACE PROBE</b><br><br>$\varnothing 24 \times 28 \text{ mm}$   | <p>This magnet probe is supplied with a 500 mm PTFE lead. Ideal for monitoring the surface temperature of ferrous metals, e.g. radiators or hotplates.</p> <ul style="list-style-type: none"> <li>Response time less than 30 seconds</li> <li>Probe temperature range -20 to 80 °C</li> </ul>  | 133-017 35.50  |
|                   | <b>VELCRO PIPE PROBE</b><br><br>$20 \times 500 \text{ mm}$   | <p>This 500 mm wrap-around velcro pipe probe is suitable for both medium and large pipe temperature measurement in the HVAC industry. Supplied with a two metre lead.</p> <ul style="list-style-type: none"> <li>Response time less than 30 seconds</li> <li>Probe temperature range -10 to 100 °C</li> </ul>                                      | 133-080 30.00  |

Please note: for handheld type T thermocouple probes, replace the third digit (3) of the order code with the number 7

For more information and our full range of probes and accessories please call our sales office or visit our website. Alternatively, if you require a special probe design, contact our technical sales team. All prices quoted are valid until 31<sup>st</sup> December 2023 and exclusive of carriage and VAT at the standard rate.

# THERMAPEN® CLASSIC - SURFACE PROBE

- Lightweight, compact & easy-to-use
- High accuracy  $\pm 0.4\text{ }^{\circ}\text{C}$
- One-handed operation
- Ideal for measuring the surface temperature of pipes

The Thermapen Classic Surface industrial thermometer has all the benefits of the Thermapen coupled to a ribbon surface probe and is particularly useful in determining the temperature of pipe temperatures or hot plates etc\*.

This Thermapen® Classic Industrial thermometer incorporates a large digital display with a precise read-out over the range of  $-49.9$  to  $299.9\text{ }^{\circ}\text{C}$  with a  $0.1\text{ }^{\circ}\text{C}$  resolution. The resolution can be switched to  $1\text{ }^{\circ}\text{C}$ , if required, via a switch in the battery compartment. The thermometer will power-off automatically after ten minutes, maximising battery life. This feature can be disabled if not required. Both low battery (icon) and open circuit indication are also displayed, when applicable. Each Thermapen® is powered by two lithium coin cell batteries with a minimum life expectancy of 1500 hours.

The thermometer probe, conveniently folds back through 180 degrees into the side of the instrument when not in use. The casing is washable and includes 'Biomaster' additive that reduces bacteria growth and the ergonomic rubber seal minimises the risk of the ingress of water, dust or food.

\* Please note with the ribbon surface probe Thermapen the accuracy and speed of response will be dependant on whether the surface is flat and heat transfer compound is used.

### OPTIONAL ACCESSORIES:

- Protective PVC wallet with belt strap (830-110)
- Protective silicone boot (830-260)
- Glow-in-the-dark silicone boot with magnets (830-265)
- Stainless steel wall bracket (832-002) screws not supplied

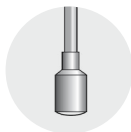


| Order code   | Description                       | £ each |
|--|-----------------------------------|--------|
| 231-212  | Thermapen Classic - surface probe | 59.00  |
| 830-260  | Protective silicone boot          | 7.00   |
| 830-265  | Silicone boot - glow in dark      | 9.50   |
| 830-110  | Protective wallet                 | 5.80   |
| 832-002  | Stainless steel wall bracket      | 13.00  |
| The Thermapen is supplied in a zip pouch (830-001) |                                   |        |



### WATERPROOF SURFACE PROBE

Ø8 x 95 mm



This waterproof ribbon surface probe is ideal for measuring the surface temperature of pipes, bearings, hotplates and other flat surfaces.



| Specification                                      | Thermapen Classic - surface probe   |
|--|---|
| Range  | $-49.9$ to $299.9\text{ }^{\circ}\text{C}$  |
| Resolution   | $0.1\text{ }^{\circ}\text{C}$ or $1\text{ }^{\circ}\text{C}$ - user selectable                |
| Accuracy   | $\pm 0.4\text{ }^{\circ}\text{C}$ ( $-49.9$ to $149.9\text{ }^{\circ}\text{C}$ ) or $\pm 1\%$ |
| Battery  | 2 x 3 volt CR2032 lithium coin cell   |
| Battery life                                       | 1500 hours  |
| Sensor type  | K thermocouple  |
| Display  | 14.5 mm LCD   |
| Dimensions   | 19 x 47 x 153 mm  |
| Weight   | 97 grams  |
| FREE traceable certificate of calibration included |   |





ETI are proud to be in  
partnership with BRCGS

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British Manufacturer

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ETI stand as a proud British exporter and since 2012 have won **four Queen's Awards for Enterprise**.